

# Work Order ID 86938

\*86938\*

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\*July-09-12 2:52:59 PM

Item ID: D2576-1 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Step (casting detail)  
 Start Date: 7/09/12 Start Qty: 50.00 \*50\* Cust Item ID:  
 Required Date: 8/10/12 Req'd Qty: 50.00 \*50\* Customer:  
 Reference:

Approvals: Process Plan: MLJ Date: 12/07/10 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2576	Rev G								

100 PURCHASING 0.00  
 \*100\*  
 Purchasing Memo 0.00  
 Purchasing Issue P/O: 17410 Ship D2576 mould to vendorCast per D2576-1  
 Pattern vendor: Alpine Non- FerrousMaterial Release Note Required

12-07-10  
(50)

110 Receive & Inspect for Damage & Mat'l Certs 0.00  
 \*110\*  
 Packaging Memo 0.00  
 Packaging Ensure D2576 mould is returned with the ordered parts Ensure release note is attached

12/1/12 (50)

120 QC6- Inspect dimensions to drawing 0.00  
 \*120\*  
 QC Memo 0.00  
 Quality Control

DAS  
16  
12/1/12

12/1/12  
(50)  
25019

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>MAT</u>	0.00							
*130*									
Packaging	Memo	0.00				50	10		
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
*140*									
QC	Memo	0.00							
Quality Control									

12/7/30   
 120730

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

July-09-12 2:52:59 PM

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Work Order ID: 86938

Parent Item: D2576-1

Start Date: 7/09/12

Required Date: 8/10/12

Parent Item Name: Step (casting detail)

Start Qty: 50.00

Required Qty: 50.00

Comments: IPP Rev: A New Issue 05-11-29 JLM  
IPP rev B rev F dwg 07.07.06 EC  
IPP Rev:C As per Rev G 07-09-05 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2576-1P Step (Casting Detail)		Purchased	No			100	Each	0.0000	1	50		6/27/12 EC	

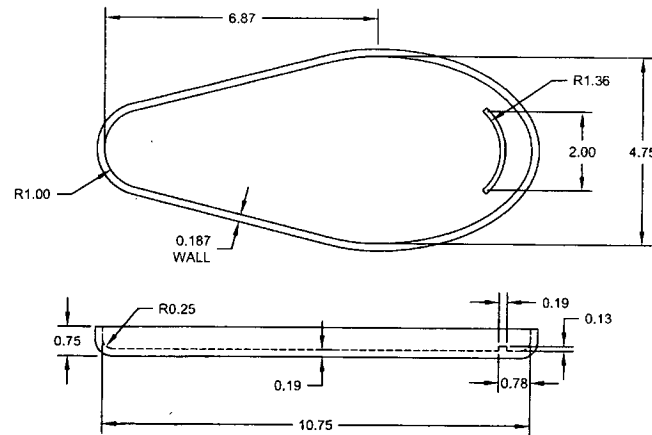
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

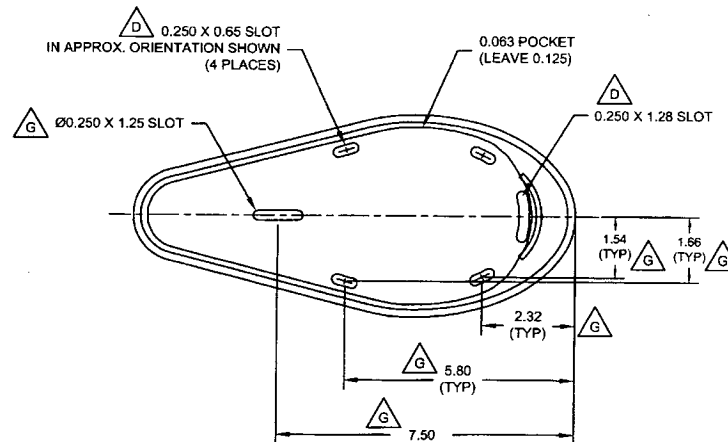
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries



**D2576-1 CASTING**



**D2576-3 MACHINING DETAIL**  
(MAKE FROM D2576-1)

**NOTES:**

- 1) MATERIAL: CAST ALUMINUM ALLOY A-535.2
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.025 TO 0.050 MAX
- 6) IDENTIFICATION: NONE

RECEIVED  
ATP  
PART BENDING  
SUBJECT TO AMENDMENT  
WITHIN NOTE  
WORK ORDER  
NO. 80938 MW  
12/07/10

**RELEASED**

07.08.29

G	- CHANGE SLOTS LOCATION AND SIZE ON D2576-3 - DUE TO SKID BENDING PROGRAM CHANGES - UPDATE CNC PROGRAM	MB	07.08.15
F	7.05 WAS 6.61	PH	07.04.17
E	CHANGE 0.50 HOLE LOCATION AND ADD NOTE	RF	99.09.07
D	CHANGE SLOT SIZE AND LOCATION (TSR A1069)	CP	99.08.18
C	ADD POCKETS AND SLOTS FOR WELDING	DS	98.08.18
B	REMOVE POCKETS, ADD HOLE	DS	96.11.28
A	NEW ISSUE	DS	96.09.18
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. G
MFG. APPR.	<i>[Signature]</i>	D2576	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	STEP	1:3
DATE	07.08.15	COPYRIGHT © 1996 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO17410

Purchase Order Date 7/10/2012

PO Print Date 7/10/2012

Page Number 1 of 1

Order From :

VC-ALP001

ALPINE NON-FERROUS FOUNDRY  
8657 - 132ND STREET  
SURREY, BC V3W 4P1  
CA

Contact Name

Vendor Phone

604 596 8080

Vendor Fax

604 596 8045

Vendor Account Nbr

Buyer

Brigitte Golden

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAKED**  
7/10/12

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2576-1P	Step (Casting Detail)	7/23/2012 Yes	50.00 Each	FedEx Overnight	\$17.7500	\$887.50

Special Inst: As per DWG: D2576 Rev: G  
B86938

PO Total:

\$887.50

CERTIFICATE OF CONFORMITY  
REQD UPON DELIVERY

MATERIAL CERTIFICATION  
REQD UPON DELIVERY

Please Confirm *bgolden@dartaero.com*

Change Nbr: 1

Change Date: 7/10/2012

No substitution or deviation without  
consent.

Certificate of Conformity - Material  
Certification required - YES NO

**ALPINE NON-FERROUS FOUNDRY**8657-132ND STREET  
SURREY, B.C. V3W 4P1

Tel: (604) 596-8080 Fax: (604) 596-8045

*PACKING LIST*  
~~WORK ORDER~~Sold To: **DART AEROSPACE**  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7  
CANADAShip To: **DART AEROSPACE**

Order Date		Purchase Order#	Due Date	Ship Via			Page
10-Jul-12		PO 17410	23-Jul-12	FEDEX			1
Item#	Item Code	Description	Material	Ordered	B/O	Qty Ready	Qty Ship
1 2	DART D2576	D2576 STEP CSTG		50			50

## Comments

Castings&amp;Patterns are property of Alpine until paid in full

# PACKING SLIP

**BECK ALUMINUM LEBANON**

Division of Beck Aluminum Alloys LTD

24 KEYSTONE DRIVE

LEBANON, PA 17042

Telephone: 717/277-0300

Fax: 717/277-0310

3133314

Ship Date

04/09/12

Sold To:

RYPAC ALUMINUM RECYCLING LTD.

11849 TANNERY RD.

SURREY, BC V3V 3W8

CANADA

Ship To:

RYPAC ALUMINUM RECYCLING LTD.

11849 TANNERY RD.

SURREY, BC V3V 3W8

CANADA

CHEMICAL ANALYSIS - ELEMENTS LESS THAN 0.01% MAY NOT BE REPORTED

Customer	Ship Via	F.O.B.	Terms	
RYPAL	CPU # 2778	LEBANON, PA	Net 30 Days	
Purchase Order Number		Salesperson	Order Date	Our Order Number
2570		JM	04/04/12	327942

Item Number / Item Description

1535.2 - PRIMARY ALUMINUM INGOT

Customer Item Code:

Heat #	LBS	SI	FE	CU	MN	MG	CR	NI	ZN	TI	PB	SN	SR	BE
X34896-050	2152	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-051	2078	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-052	2120	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-053	2040	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-054	2022	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-055	2022	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-056	2110	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-057	2040	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-058	2066	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-059	1966	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-060	2320	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-061	2226	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-062	1900	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-063	2056	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-064	1982	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-065	2032	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-066	2174	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-067	2048	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-068	2190	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-069	2122	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
X34896-070	2048	0.08	0.08	0.00	0.17	7.21	0.00	0.00	0.01	0.17	0.00	0.00	0.00	0.0036
Weighted Avg.		0.080	0.080	0.000	0.170	7.210	0.000	0.000	0.010	0.170	0.000	0.000	0.000	0.004

Special Requirements: INVOICE, PACKING LIST AND COA FAXED OR EMAILED ASAP.

Delivery Information: CPU, Van

Total 43714

CAUTION: INGOTS ARE SUBJECT TO THE FORMATION OF SHRINKAGE CAVITIES WHICH MAY ENTRAP MOISTURE: SUCH MOISTURE CAN CAUSE AN EXPLOSION HAZARD. TO MINIMIZE THIS HAZARD, ALL INGOTS MUST BE THOROUGHLY DRIED TO REMOVE ANY ENTRAPPED MOISTURE BEFORE CHARGING THEM INTO MOLTEN METAL

*Dennis P. Hoagy* 4912  
Authorized Signature Date